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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/908,994	07/17/2001	John Shigeura	4470	8729

20995 7590 08/09/2007

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EXAMINER
SISSON, BRADLEY L

ART UNIT	PAPER NUMBER
1634	

NOTIFICATION DATE	DELIVERY MODE
08/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
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Advisory Action Before the Filing of an Appeal Brief	Application No. 09/908,994	Applicant(s) SHIGEURA ET AL.	
	Examiner /Bradley L. Sisson/	Art Unit 1634	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *21-38*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Bradley L. Sisson/
Primary Examiner
Art Unit: 1634

Continuation of 11. does NOT place the application in condition for allowance because: n contrast to assertions of applicant's representative, the teachings of US Patent 5,593,838 (Zanzucchi et al.) are directly combinable with that of US Patent 5,607,646 (Okano et al.).
In the response of 24 July 2007 argument is made that Zanzucchi et al., cannot be combined with Okano et al., because, under certain embodiments, a valve is employed in the device of Zanzucchi et al., and that this valve is sensitive to heat such that upon heating fluid in one well, the valves would block fluid flow into a second well/chamber, as described by Okano et al.

This argument has been fully considered and has not been found persuasive for claim 21, step (b), requires "altering a physical property of that support while leaving unaltered the same physical property of at least one other of the supports." Zanzucchi et al., does just this.
By Zanzucchi et al., employing a temperature-sensitive valve, the requisite change in a physical property (heating) is taking place in one well, therein allowing of the release of the nucleic acids from the support, and not allowing the heated solution to pass into a second well/chamber. Once the temperature has cooled, the valve opens, allowing the now-released nucleic acids to flow from one chamber into another, while not heating a second or subsequent support. It is noted with particularity that the claimed method requires that the physical property changed in the first solid support be not changed in the second, and that claim 22 stipulates that this physical property is heating. The temperature sensitive valves of Zanzucchi et al., allow this very requirement to be practiced.
If one of ordinary skill in the art waned to employ the general design of Zanzucchi et al., which did not include a valve (see Figs 12), yet have the option of serial wells/supports as well as parallel supports, one would have been motivated to incorporate the electrode-specific heating means of Okano et al. Here, the heating is strictly limited to the support where the nucleic acid is bound. By heating only the support of interest, one is able to selectively release and elute the nucleic acid from one support all the while retaining non-target nucleic acids on other support(s). Indeed, Okano et al., column 3, teach at length of how such a selective release and elution can be performed. Okano et al., column 4, also disclose how temperature-specific release of nucleic acids can be performed.

Argument has been presented that no evidence has been presented showing the state of the art to be well developed. This argument has not been found persuasive as the teachings of Zanzucchi et a., Okano et al., and Brennan all provide extensive teachings of how nucleic acids can be selectively hybridized and eluted form the most intricate of devices. Clearly, such showings speak directly to the art being well developed.
Argument has also been presented that given how the art cannot be combined, there is no reasonable expectation of success. This argument has not been found persuasive for as shown above, the art can be combined. Further, the very elements that applicant asserts are a hindrance, are fairly encompassed by the claimed method and in fact serve to fulfill the requirements/limitations in various alternative embodiments. Further, the elements of the prior art cited are relied upon to function in the manner disclosed, and therein result in an expected end result- the selective elution/release of nucleic acids off of a solid support.
For the above reasons, and in the absence of convincing evidence to the contrary, the rejection of claims under 35 USC 103(a) is maintained.